REMARKS

Claims 1-26 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Bharatia (US 2001/0031635) in view of Surdila et al. (US 2002/0110104). Applicant has cancelled claims 1-6 and 14-20. Applicant respectfully disagrees with the rejection of the remaining claims.

Applicant's invention provides a communication system having features and services that can be utilized by both circuit-switched and packet-switched mobile units, without having to provide separate software and/or hardware for circuit-switched or packet-switched communication systems.

Applicant's invention enables an IP Multimedia Subsystem (IMS) to support features and services for mobile units using either circuit-switched or IP Multimedia call control procedures. Thus the advantages of the IMS are available for mobile units using either circuit-switched or IP Multimedia call control procedures and new features and services can be defined, developed and deployed simultaneously for both CS and PS communication systems.

In particular, the architecture of the present invention enables home control of all services – whereby the IMS provides feature and service control from the home network rather than the serving network – to be available for all circuit-switched services. Furthermore, the present invention provides for fully interworking with systems using circuit-switched architecture. This same approach generalizes to allowing a single IMS with minor modifications to provide feature and service control for mobile units using various access technologies and call control protocols, including, for example, Session Initiation Protocol (SIP) over Asymmetric Digital Subscriber Line (ADSL), H.323 over Cable, and Integrated Services Digital Network (ISDN).

The present invention introduces a new logical entity into a communication system, an interworking MSC (iMSC) server. In the preferred embodiment of the present invention, the communication system utilizes a UMTS network architecture. Alternately, the communication system utilizes CDMA or other access technologies. The iMSC server translates the CS domain registration, call control, feature control, and feature invocation procedures associated with the access technology to standard SIP procedures. The iMSC server acts as a SIP UA (user agent) on behalf of the UE (user equipment) while otherwise behaving like the Proxy – Call State Control Function (P-CSCF) within the UMTS IMS. The media gateway (MGW) under the control of the

iMSC server converts the air interface media flow into an RTP/UDP/IP packet stream that is managed by SIP procedures within the IMS.

In contrast to the traditional MSC, which performs all feature and service control for UEs it serves, the iMSC server of the present invention translates air interface control procedures into SIP, allowing all feature and service control to be performed by the Serving CSCF (S-CSCF) within the IMS. To support UEs homed within an IMS while being served by a traditional MSC, the present invention provides for the IMS to emulate a Gateway MSC for terminating services.

The **Bharatia** reference relates to terminal roaming operations between intergenerational wireless networks.

The **Surdila et al.** relates to a hybrid media gateway control function providing circuit-switched access to a packet-switched radio telecommunications network.

Claim 7 relates to a method for registering a mobile unit with a communication system including a serving system and a home system. The serving system comprises an interworking MSC (iMSC) and an IP Multimedia Subsystem (IMS).

The Office Action admits that the Bharatia reference does not disclose an interworking MSC. The Office Action then goes on to state that this deficiency is made up in the Surdila reference. Applicant respectfully disagrees. Applicant has searched the Surdila reference and has found no mention of an interworking MSC (iMSC). Without this element, it is unfair to suggest that the references teach or suggest a communication system that includes an iMSC, and further one in which it is determines that the serving system must process the mobile unit as an iMSC, as in claim 7.

Without a teaching of a communication system including an iMSC, a prima facie case of obviousness has not been made. As such, the 103 rejection of obviousness is improper and cannot stand.

Claims 8-9 depend from claim 7, and are not anticipated for the reasons set forth with regard to claim 7.

Claim 10 ultimately depends from claim 7, and is not obvious for the reasons set forth with regard to claim 7. Further, neither reference teaches or suggests performing interworking between call control procedures between the iMSC and the IMS. In fact, neither reference

includes an interworking MSC (iMSC). Therefore, the two references do not obviate Applicant's invention as embodied in claim 10.

Claim 11 depends from claim 7, and are not anticipated for the reasons set forth with regard to claim 7.

Claim 12 depends from claim 7, and is not obvious for the reasons set forth with regard to claim 7. Further, claim 12 calls for forwarding the call termination to the iMSC in the serving system. As mentioned above, neither reference teaches or suggests a communication system that includes an iMSC. Therefore, the reference cannot be suggested to obviate Applicant's invention as embodied in claim 12.

Claim 13 depends from claim 12, and are not anticipated for the reasons set forth with regard to claim 12.

Claim 21 relates to a method for registering a mobile unit with a communication system that includes a serving system and a home system. The serving system includes an MSC and an iMSC. As mentioned above, neither reference teaches or suggests a communication system that includes an iMSC. Therefore neither reference can teach or suggest determining if the serving system can process a mobile unit as an iMSC, as called for in claim 21. Therefore, claim 21 cannot be obviated by these two references.

Claims 22-23 depend from claim 21, and are not anticipated for the reasons set forth with regard to claim 21.

Claim 24 ultimately depends from claim 21, and is not obvious for the reasons set forth with regard to claim 21. Further, neither reference teaches or suggests performing interworking between call control procedures by the iMSC in the serving system and the IMS in the home system. In fact, neither reference includes an interworking MSC (iMSC). Therefore, the two references do not obviate Applicant's invention as embodied in claim 24.

Claim 25 depends from claim 21, and are not anticipated for the reasons set forth with regard to claim 21.

Claim 26 depends from claim 21, and is not obvious for the reasons set forth with regard to claim 21. Further, claim 26 calls for forwarding the call termination to the iMSC in the serving system. As mentioned above, neither reference teaches or suggests a communication

system that includes an iMSC. Therefore, the reference cannot be suggested to obviate Applicant's invention as embodied in claim 26.

Accordingly, Applicant respectfully requests that the Examiner reconsider and withdraw the rejection of claims 7-13 and 21-26 and allow claims 7-13 and 21-26. Applicant believes that the application is in condition for allowance. Favorable reconsideration of this application in light of the above is respectfully requested. If a telephone interview with Applicant's Attorney would further the prosecution of the present application, the Examiner is invited to contact the undersigned at the indicated telephone number.

Respectfully,

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